

CLAIMS:

1. A particulate material containing phospholipids with docosaheptaenoic acid (DHA) residues prepared by drying a slurry comprising a polar lipid extract from DHA-containing microbes.
- 5 2. The particulate material of claim 1, wherein the mean particle size is between 5 microns and 10 microns.
3. The particulate material of claim 1, wherein the slurry is dried by spray drying.
4. The particulate material of claim 1, wherein the slurry is substantially free  
10 of material which did not originate in said DHA-containing microbes.
5. The particulate material of claim 1, wherein at least 10 % of the fatty acid residues in lipids of said microbes are DHA residues.
6. The particulate material of claim 1, wherein at least 10 % of the fatty acid residues in polar lipids of said microbes are DHA residues.
- 15 7. The particulate material of claim 1, wherein said microbes are dinoflagellates.
8. The particulate material of claim 1, wherein said microbe are *Cryptocodinium cohnii*.
9. A method for preparing a DHA-containing particulate material  
20 comprising drying a slurry containing polar lipids extracted from dinoflagellates, wherein the dried material is in the form of particles having a mean particle diameter between 5 and 10 microns.

10. A method for preparing a DHA-containing particulate material comprising lysing DHA-containing microbial cells; extracting lysed cells with solvent; separating a polar lipid fraction from the extract; and drying the polar lipid fraction, with or without addition of other nutrients, to form a particulate material.

5 11. The method of claim 10, wherein the polar lipid fraction is an aqueous slurry which is dried by spray drying.

12. The method of claim 10, wherein the microbial cells are dinoflagellate cells.

13. The method of claim 10, wherein the microbial cells are cells of  
10 *Cryptocodinium cohnii*.

14. An aqueous emulsion or suspension containing phospholipids with docosahexaenoic acid (DHA) residues prepared by Homogenizing with water a polar lipid extract from DHA-containing microbes.

15 15. The emulsion or suspension of claim 1, wherein at least 10 % of the fatty acid residues in lipids of the microbes are DHA residues.

16. The emulsion or suspension of claim 1, wherein at least 10 % of the fatty acid residues in polar lipids of said microbes are DHA residues.

17. The emulsion or suspension of claim 1, wherein said microbes are dinoflagellates.

20 18. The emulsion or suspension of claim 1, wherein said microbes are *Cryptocodinium cohnii*.

19. A composition comprising a particulate material containing phospholipids with DHA prepared by drying a slurry comprising a polar lipid extract from DHA-containing microbes and a meal containing protein, carbohydrate, or both.

20. The composition of claim 19, wherein meal comprises microbial cells or  
5 cell fragments.

21. The composition of claim 19, wherein the microbial cells or cell fragments are from *Chlorella*.

22. The composition of claim 19 wherein the microbial cells or cell fragments are from *Cryptocodinium*.

10 23. The composition of claim 19, wherein the microbial cells or cell fragments are from a yeast.

24. The composition of claim 19, wherein the microbial cells or cell fragments are from *Mortierella*.